



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D5445-041
Job Sheet 180709



Part No: D5445-041

Job Qty: 2 ea

Part Name: Longitudinal Beam Assembly, LH



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 7/12/18

Job Tracking No:

Due Date: 7/31/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG REV C SHEETS 1,4 IPP REV:A NEW ISSUE 16-07-07 JLM VERIFIED BY:DD IPP REV:B 17.01.10 AS PER DWG REV.C DD VERF:JLM IPP REV:C 17.11.15 REVISE AS PER INTUITIVE INSTRUCTION DD VERF:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	2 Ea		7/31/18	0.00	0.00	Start Up Skidtubes		MC
100	CNC Bend Skidtubes	2 pcs		7/31/18	0.00	2.00	CNC Bend Skidtube		m66
110	QC	2 pcs		7/31/18	0.00	0.00	QC2		2/p
120	Mill Conv	2 pcs		7/31/18	0.00	2.00	Mill Conv 1		18/10/13
130	QC	2 pcs		7/31/18	0.00	0.00	QC2		18/10/14
140	QC	2 pcs		7/31/18	0.00	0.00	QC8		18/10/14
150	HandFinish	2 pcs		7/31/18	0.00	1.00	HandFinish1		DAS
160	QC	2 pcs		7/31/18	0.00	0.00	QC7		58
170	Small Fab	2 pcs		7/31/18	0.00	1.33	Small Fab		9-89
180	QC	2 pcs		7/31/18	0.00	0.00	QC5		38
184	Skidtubes	2 pcs		7/31/18	0.00	1.00	Skidtubes-3		9-89
186	QC	2 pcs		7/31/18	0.00	0.00	QC5		18-10-5
190	Powdercoat	2 pcs		7/31/18	0.00	0.40	Powdercoat1		18-10-5
200	QC	2 pcs		7/31/18	0.00	0.00	QC3		AN
210	HandFinish	2 pcs		7/31/18	0.00	1.00	HandFinish4		Simf
220	QC	2 pcs		7/31/18	0.00	0.00	QC5		21
230	Packaging	2 pcs		7/31/18	0.00	0.00			6
240	QC21-SA	2 Ea		7/31/18	0.00	0.00	QC21		0102 9 0 100

Part Op 100 - BEND/CUT AS PER DWG

Descriptions: 120 - -MILL/DRILL/C/SINK AS PER DWG. -Insure proper orientation -DEBURR

170 - INSTALL NUT PLATES AS PER DWG

184 - 1- Pick (4) D4720-1 space for each beams and chemical convert them. 2- Swage x-bolt spacers as per dwg. Trim off access material as required. 3- After swaging, ream x-spacer hole if necessary to finish size. 4- Touch up alodine after swaging. 5-INSTALL END CAPS

190 - ***MASK NUT PLATE HOLES*** START TIME: 10:35 OVEN TEMPERATURE: 325° FINISH TIME: 11:05

210 - SEAL END CAPS WITH SIKAFLEX AS PER NOTE 11

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M6061T6TR1.5X1.0W125	6061-T6 Rect Tube 1.5 X 1.0 X .125W	12 ft (6 ea)	90-Start up Operation	5095912
CR2672-3-(03)	Cherry Rivet	16 Ea (8 ea)	170-Small Fab	5057521
MS21059-4	Nut Plate	6 Ea (3 ea)	170-Small Fab	5024223

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																		
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Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																		
Large Fab ☐	Composite ☐	Supplier ☐																			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval																	
Description Work Order Deviation		Disposition		Completed By																	
				Lead hand / Supervisor Approval Verification																	
				QC / QA Coordinator Approval																	
<table style="width:100%; border: none;"> <tr> <td style="width:25%; vertical-align: top;"> Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ </td> <td style="width:25%; vertical-align: top;"> No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐ </td> <td style="width:25%; vertical-align: top;"> Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ </td> <td style="width:25%; vertical-align: top;"> FAULT CATEGORY Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ </td> <td style="width:25%; vertical-align: top;"> Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ </td> <td style="width:25%; vertical-align: top;"> Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐ </td> </tr> </table>					Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	FAULT CATEGORY Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐											
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OTHER : _____																					

MS21061L4
D4720-1
D5445-043
MS24694-S3

Nutplate
Spacer
End Cap Assembly
Screw

2 Ea (1 ea) 170-Small Fab
8 Ea (4 ea) 184-Skidtubes
4 Ea (2 ea) 184-Skidtubes
8 Ea (4 ea) 184-Skidtubes

65257
~~5074203~~
~~5030687~~
~~7158775~~
5094431

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	M6061T6TR1.5X1.0W125	12	12	0
170-Small Fab	CR2672-3-(03)	16	71	0
	MS21059-4	6	43	0
	MS21061L4	2	49	0
184-Skidtubes	D4720-1	8	312	0
	D5445-043	4	20	0
	MS24694-S3	8 16	15	0

Part Specifications

Specifications could not be found.

Plex 7/12/18 9:13 AM Dart.lajeunesse.marie

DART
AEROSPACE

1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 813 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S107065



Part: D5445-041

Job No: 180709

Serial No/Batch: S107065

Revision: C

Inspector:

Exp Date:

Instructions: Various STC's

Date: 10/05/18

D5445-043
7158775

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

DART AEROSPACE LTD		Work Order:	180709
Description: LBA LH		Part Number:	D.5445-1
Inspection Dwg: D.5445	Rev: C	Page 1 of 1	

INSPECTION SHEET

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.00 Ref	± 0.03	0.998	/		Vernier IVOS	
1.50 Ref	"	1.496	/		"	
0.13 Ref	"	0.128	/		"	
62.8	± 0.12	62.810	/		Tape	
0.60	± 0.020	0.595	/		Vernier IVOS	
0.177	$+0.005 -0.001$	0.178	/		"	
0.320 $\times 100^\circ$	$\pm 0.010 \pm 1/2^\circ$	0.320 100°	/		"	
0.85	± 0.030	0.850	/		"	
1.200	± 0.010	1.200	/		"	
0.500	"	0.499	/		"	
0.50	± 0.03	0.500	/		"	
54.63	"	54.625	/		Tape	
1.50	"	1.499	/		Vernier IVOS	
0.600	± 0.010	0.599	/		"	
0.300	"	0.300	/		"	
0.375	$+0.006 -0.001$	0.376	/		"	
4.97	± 0.030	4.970	/		"	
1.000	± 0.010	1.000	/		"	
0.098 (8x)	$+0.004 -0.001$	0.098	/		"	
0.179 $\times 100^\circ$	$+0.010 \pm 1/2^\circ$	0.180 100°	/		"	
0.500	± 0.010	0.499	/		"	
0.312	"	0.312	/		"	
0.266 (4x)	$+0.006 -0.001$	0.267	/		"	
0.500	± 0.010	0.500	/		"	
1.000 (3x)	"	1.000	/		"	

Measured by: 	Checked by:	QC Inspector:
Date: 18/10/14	Date:	Date:

Engineering Approval: (If necessary)	Date:
---	-------

Rev	Date	Change	Revised by	Approved
A	14.07.31	New Issue	KJ	

DQA: _____ Date: _____

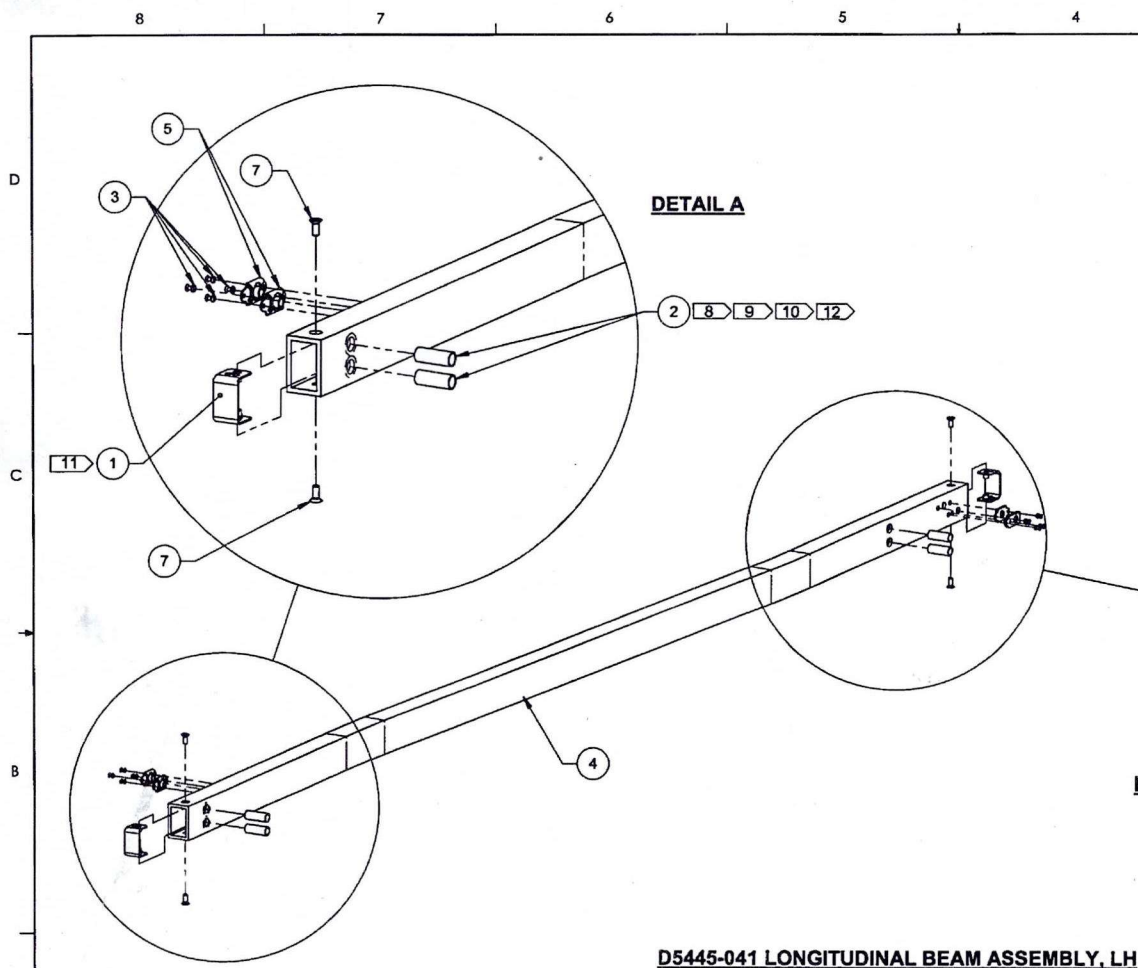


WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval				
Description Work Order Deviation				Disposition							
Root Cause		FAULT CATEGORY									
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :							
Misidentified	☐	Past Due	☐								



D5445-041 LONGITUDINAL BEAM ASSEMBLY, LH

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 3.50 lbs
- 8) SWAGE TO $\phi 0.313$ THRU PER QSI 002 4.2
- 9) TRIM/GRIND FLUSH PER QSI 002
- 10) REAM THRU SPACERS USING $\phi 0.313$ REAMER
- 11) SEAL END CAPS WITH SIKAFLEX-241/-291
- 12) MASK HOLES PRIOR TO POWDER COAT

ITEM	QTY	P/N	DESCRIPTION
	X	D5445-041	LONGITUDINAL BEAM ASSEMBLY, LH
1	2	D5445-043	END CAP ASSEMBLY
2	4	D5445-5	SPACER
3	8	CR2672-3-(03)	RIVET CHERRY, CSK
4	1	D5445-1	LONGITUDINAL BEAM, LH
5	3	MS21059-4	NUT PLATE
6	1	MS21061L4	NUT PLATE
7	4	MS24694-S3	SCREW, CSK 100°
8	A/R	SIKAFLEX-241/-291	SEALANT

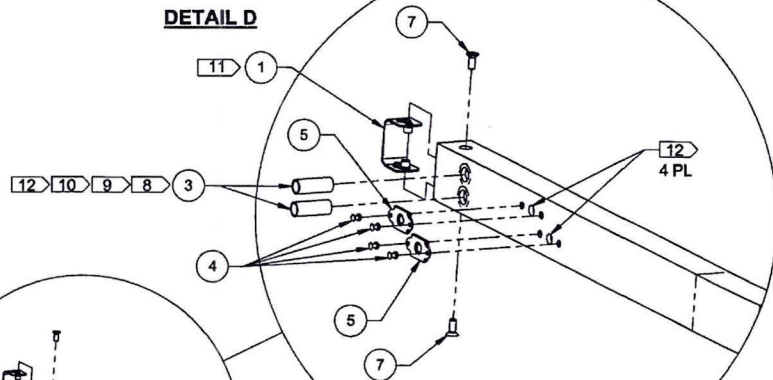
C	2.05 WAS 1.45 (ZN C1-4 & C2-5); REVISE -3F (ZN C5-6)	RF	17.02.09
B	REDESIGN -1/2-041/-042 (ZN A4-1, A4-2, B4-4, B4-5); ADDED -5 (ZN B4-7), REVISE BOM & NOTES (ZN A8-1, A8-2, D3-1, D3-2)	RF	16.11.18
A	NEW ISSUE	RF	16.05.24
REV.	DESCRIPTION	BY	DATE

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	WK	DRAWING NO.	REV. C
MFG. APPR.	JLM	D5445	SHEET 1 OF 7
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	LONGITUDINAL BEAM ASSY	NTS
DATE	17.02.09	COPYRIGHT © 2016 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IF IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

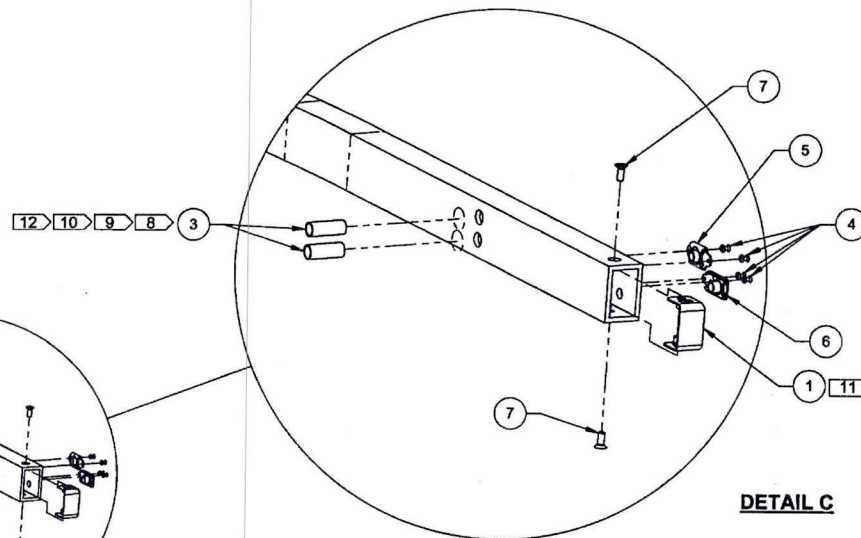
RELEASED
2017-03-22
EW 17-535

APPROVED

DETAIL D



ITEM	QTY	P/N	DESCRIPTION
	X	D5445-042	LONGITUDINAL BEAM ASSEMBLY, RH
1	2	D5445-043	END CAP ASSEMBLY
2	1	D5445-2	LONGITUDINAL BEAM, RH
3	4	D5445-5	SPACER
4	8	CR2672-3-(03)	RIVET CHERRY, CSK
5	3	MS21059-4	NUT PLATE
6	1	MS21061L4	NUT PLATE
7	4	MS24694-S3	SCREW, CSK 100*
8	A/R	SIKAFLEX-2411-291	SEALANT



DETAIL C

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 3.50 lbs
- 8) SWAGE TO $\phi 0.313$ THRU PER QSI 002 4.2
- 9) TRIM/GRIND FLUSH PER QSI 002
- 10) REAM THRU SPACERS USING $\phi 0.313$ REAMER
- 11) SEAL END CAPS WITH SIKAFLEX-2411-291
- 12) MASK HOLES PRIOR TO POWDER COAT

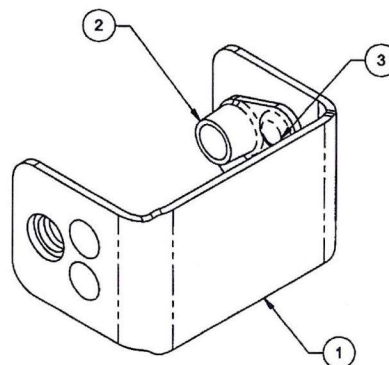
D5445-042 LONGITUDINAL BEAM ASSEMBLY, RH

RELEASED
2017-03-22

APPROVED

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	WK	DRAWING NO.	REV. C
MFG. APPR.	JLM	D5445	SHEET 2 OF 7
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	LONGITUDINAL BEAM ASSY	NTS
DATE	17.02.09	COPYRIGHT © 2018 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISSEMINATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

ITEM	QTY -043	P/N	DESCRIPTION
	X	D5445-043	END CAP ASSEMBLY
1	1	D5445-3	END CAP
2	2	MS21086L08	ANCHOR NUT
3	4	MS20426AD3-(4)	RIVET, SOLID, CSK



D5445-043 END CAP ASSEMBLY

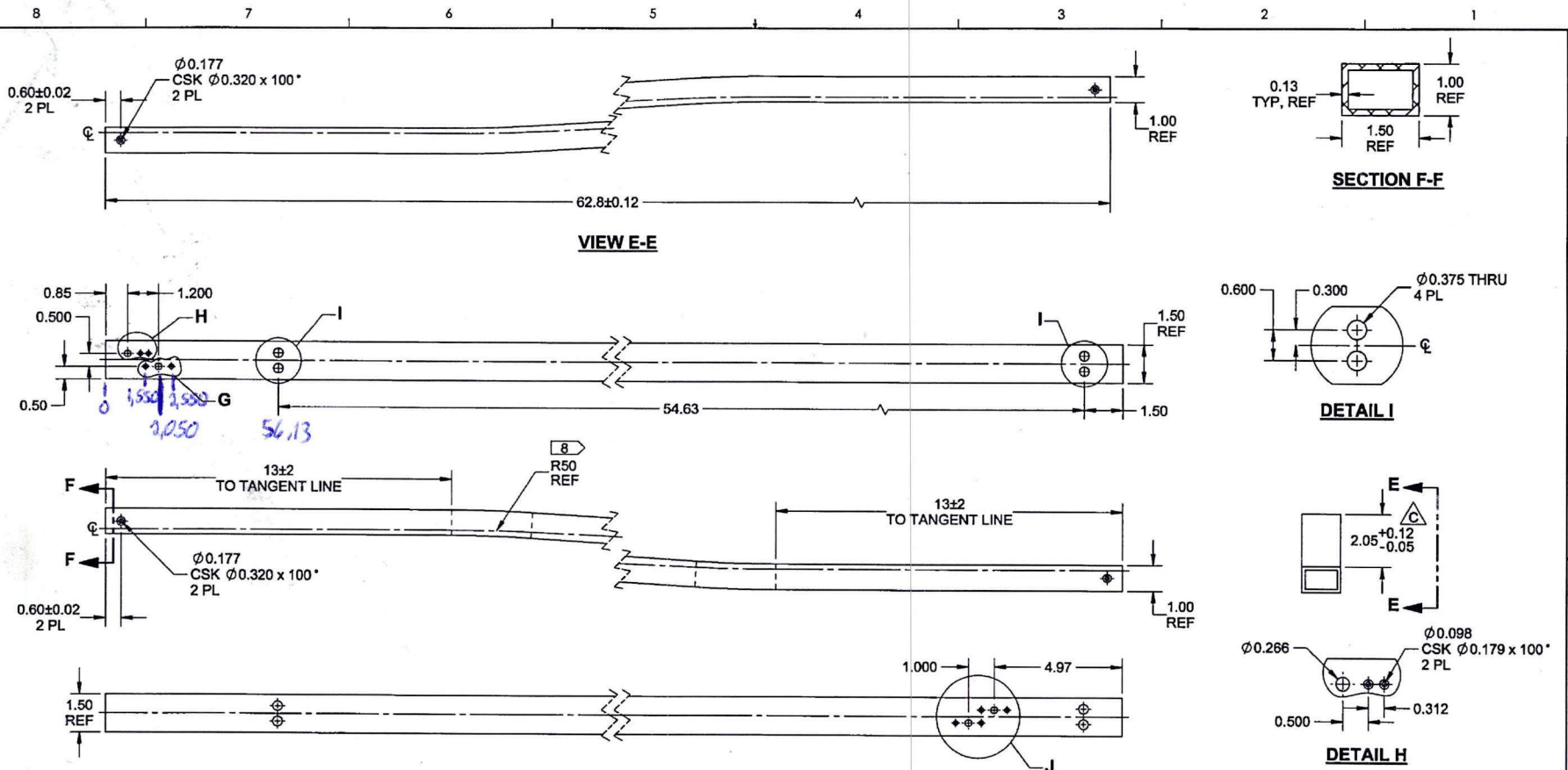
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.7
- 7) WEIGHT: 0.01 lbs

RELEASED
2017-03-22

APPROVED

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	WK	DRAWING NO.	REV. C
MFG. APPR.	JLM	D5445	SHEET 3 OF 7
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	LONGITUDINAL BEAM ASSY	NTS
DATE	17.02.09	COPYRIGHT © 2016 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



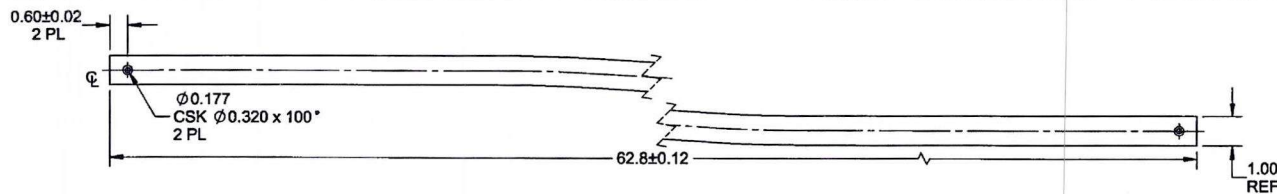
D5445-1 LONGITUDINAL BEAM, LH

NOTES:

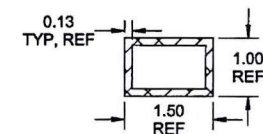
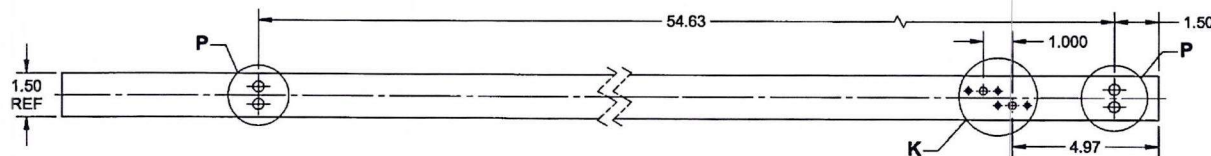
- 1) MATERIAL: POSSIBLE VENDOR McMASTER CARR, P/N 6546K38, 6ft IN LENGTH
6061-T6 RECTANGULAR TUBE 1.5" x 1.0" x 0.125" WALL
PER ASTM B221, YIELD STRENGTH: 35,000 psi
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 3.43 lbs
- 8) BEND RADIUS NOT CRITICAL

RELEASED
2017-03-22

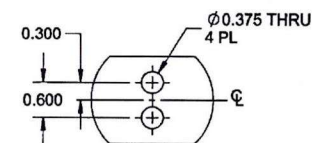
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	WK	DRAWING NO.	REV. C
MFG. APPR.	JLM	D5445	SHEET 4 OF 7
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	LONGITUDINAL BEAM ASSY	NTS
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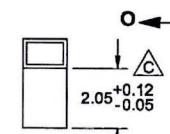
VIEW O-O



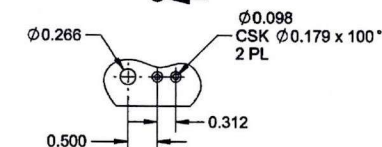
SECTION L-L



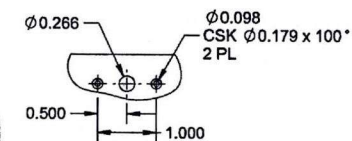
DETAIL P



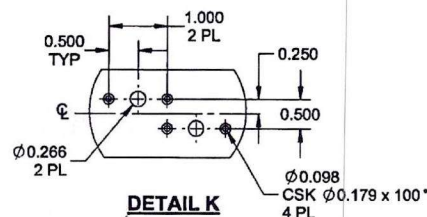
DETAIL N



DETAIL M



D5445-2 LONGITUDINAL BEAM, RH



DETAIL K

NOTES:

- 1) MATERIAL: POSSIBLE VENDOR McMASTER CARR, P/N 6546K38, 6ft IN LENGTH
6061-T6 RECTANGULAR TUBE 1.5" x 1.0" x 0.125" WALL
PER ASTM B221, YIELD STRENGTH: 35,000 psi
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 3.43 lbs
- 8) BEND RADIUS NOT CRITICAL

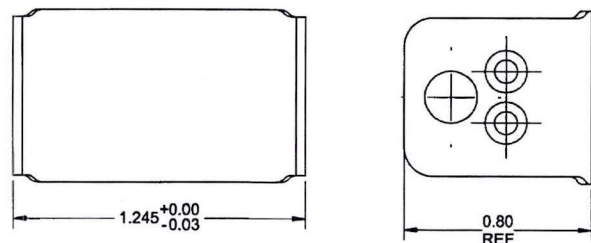
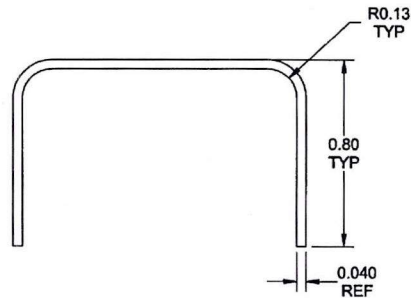
RELEASED
2017-03-22

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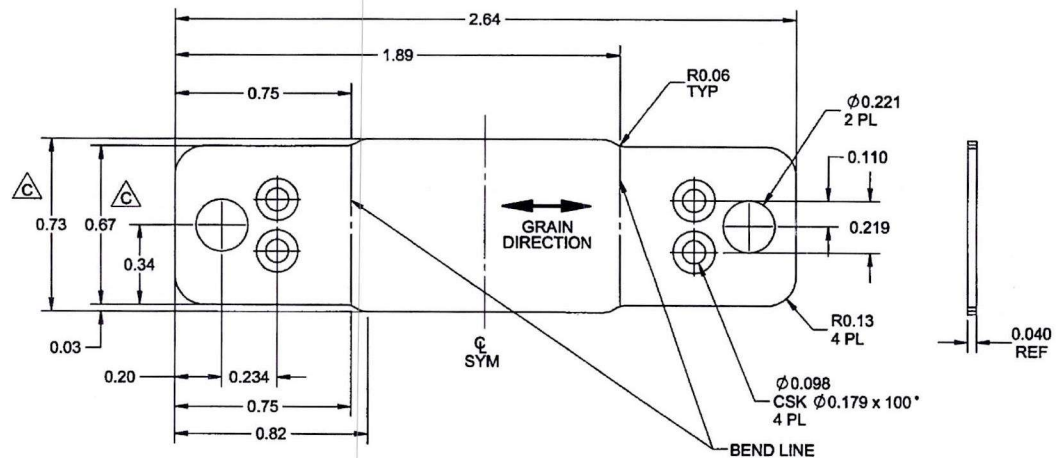
DESIGN	RF
DRAWN	RF
CHECKED	WK
MFG. APPR.	JLM
APPROVED	HS
DE APPR.	DS
DATE	17.02.09

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D5445	REV. C
TITLE LONGITUDINAL BEAM ASSY	SHEET 5 OF 7
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8 7 6 5 4 3 2 1



D5445-3 END CAP
(MAKE FROM D5445-3F)



D5445-3F FLAT PATTERN

NOTES:

- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.040 THICK
PER QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027 OR ASTM B209
REF DART SPEC M6061T6S
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.01 lbs

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2017-03-22

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DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	WK	DRAWING NO.	REV. C
MFG. APPR.	JLM	D5445	SHEET 6 OF 7
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	LONGITUDINAL BEAM ASSY	NTS
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8 7 6 5 4 3 2 1